#### RAIL CROSSING SAFETY

**PROJECT SCOPE/DESCRIPTION:** These projects involve the selection of safety improvements at highway/rail crossings throughout the state as identified by the department's Safety Rail Improvement Program.

Improvements along Camden Wyoming Avenue and Southern Boulevard, Wyoming can include but may not be limited to closing two railroad crossing in town, including Third Street and Broad Street as is the desire of Norfolk Southern. Representatives from Norfolk Southern, DelDOT and Delaware Transit Corporation (DTC) met with the Wyoming Town Council on February 13, 2002, to identify candidate crossings for closure to enhance safety of the motoring public.

Traffic data presented by Delaware Transit Corporation indicate this will create a minimum redirection of traffic flow. Upon closing the two crossings, Norfolk Southern will upgrade the remaining grade crossing warning devices to enhance safety and convenience of motorists. Upgrading the signal electronics allows Norfolk Southern to reduce the number of railroad "telephone" poles from fifteen to three in town. These closures will also eliminate two locations where passing locomotives must sound the horn.

The Dover/Kent Metropolitan Planning Organization (MPO), through the MPO Process identified one additional project outside the normal rail crossing safety program for improvements in the Town of Wyoming. The department will review the need for any additional intersection or pedestrian improvements in this area after the rail crossing closures are complete.

**PROJECT JUSTIFICATION:** These improvements are federally mandated safety programs and intersection programs that provide safe turning movements and alleviate congestion.

County: Statewide

**Municipality:** 

**Funding Program:** Road System – Other

Functional Category: Management Representative District: Statewide Senatorial District: Statewide

# RAIL CROSSING SAFETY (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
Rail Crossing Safety		\$ 725.0						
				2 4 402 6				
Prior Years	State			\$ 1,489.6	\$ 1,193.8	\$ 12.3	\$ 1,181.5	\$ 295.8
	Federal			\$ 2,250.0	\$ 256.3	\$ 110.7	\$ 145.6	\$ 1,993.7
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 725.0	\$ 191.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 486.8
	Federal			\$ 818.8	\$ 0.0	\$ 0.0	\$ 0.0	\$ 2,812.5
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
EN 2007 A (I : I	G			0.1625				0 (40.2
FY 2005 Authorized	State Federal			\$ 162.5 \$ 562.5				\$ 649.3 \$ 3,375.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 162. <b>5</b>				\$ 811.8
FY 2006 Projected				\$ 162.5 \$ 562.5				
	Federal Other			\$ 502.5 \$ 0.0				\$ 3,937.5 \$ 0.0
	Other			3 0.0				\$ 0.0
FY 2007 Projected	State			\$ 162.5				\$ 974.3
-	Federal			\$ 562.5				\$ 4,500.0
	Other			\$ 0.0				\$ 0.0
777 2000 2010 P. J. J.								
FY 2008-2010 Projected	State			\$ 325.0				\$ 1,299.3
	Federal Other			\$ 1,125.0 \$ 0.0				\$ 5,625.0 \$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 2,493.1	\$ 1,193.8			\$ 1,299.3
	Federal			\$ 5,881.3	\$ 256.3			\$ 5,625.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 725.0	\$ 725.0	\$ 8,374.4	\$ 1,450.1	\$ 123.0	\$ 1,327.1	\$ 6,924.3

# RAIL CROSSING SAFETY (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	Rail Crossing Safety	PE, RW, C	90% FHWA 100% ST	\$ 6,250.0 1,839.6	\$ 2,500.0 1,239.6	\$ 625.0 100.0	\$ 625.0 100.0			\$ 1,250.0 200.0
		PE, KW, C	100% 51	1,839.0	1,239.0	100.0	100.0	100.0	100.0	200.0
23-005-02	Rail Crossings Closures/Upgrades, Wyoming, (formerly Camden Wyoming Avenue and Southern Boulevard, Wyoming, TE project)	PE, C	90% FHWA	284.8	0.0	284.8	0.0	0.0	0.0	0.0
	Total All Funds			\$ 8,374.4	\$ 3,739.6	\$ 1,009.8	\$ 725.0	\$ 725.0	\$ 725.0	\$ 1,450.0

#### SAFETY IMPROVEMENT PROGRAM

#### PROJECT SCOPE/DESCRIPTION:

**Highway Safety Improvement Program (HSIP):** This program is a federally funded program to identify locations and reduce the severity and frequency of accidents. This is done through the identification of locations, accident patterns, conducting field studies, and developing potential solutions. After the HSIP committee reviews this information, HSIP develops improvements alternately through public workshops for implementation. HSIP funds are designated within specific project requests.

**Operational Safety Improvements:** These projects are identified through the HSIP program as low-cost, high-safety benefit improvements through the installation or modification of traffic control devices statewide, without the need for full design or right of way acquisition.

**PROJECT JUSTIFICATION:** These improvements are federally mandated safety programs and intersection programs that provide safe turning movements and alleviate congestion.

County: Statewide

**Municipality:** 

**Funding Program:** Road System – Other

Functional Category: Management Representative District: Statewide Senatorial District: Statewide

# SAFETY IMPROVEMENT PROGRAM (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
Safety Improvement Program		\$ 17,941.3						
Prior Years	State			\$ 2,014.5	\$ 0.0	\$ 0.0	\$ 0.0	\$ 2,014.5
Thor rears	Federal			\$ 4,360.8	\$ 0.0	\$ 0.0	\$ 0.0	\$ 4,360.8
	Other			\$ 4,300.8	\$ 0.0	\$ 0.0	\$ 0.0	\$ 4,500.6
FY 2004	State		\$ 17,941.3	\$ 225.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 2,239.5
	Federal			\$ 400.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 4,760.8
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 250.0				\$ 2,489.5
1 2000 Hamorinea	Federal			\$ 0.0				\$ 4,760.8
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 394.1				\$ 2,883.6
	Federal			\$ 1,296.9				\$ 6,057.7
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 450.0				\$ 3,333.6
•	Federal			\$ 1,800.0				\$ 7,857.7
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 1,350.0				\$ 4,683.6
1 1 2000-2010 110jecteu	Federal			\$ 5,400.0				\$ 13,257.7
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 4,683.6	\$ 0.0			\$ 4,683.6
	Federal			\$ 13,257.7	\$ 0.0			\$ 13,257.7
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 17,941.3	\$ 17,941.3	\$ 17,941.3	\$ 0.0	\$ 0.0	\$ 0.0	\$ 17,941.3

# SAFETY IMPROVEMENT PROGRAM (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	Safety Improvement Program									
23-010-01	Highway Safety Improvement Program (HSIP)	PE, RW, C	90% FHWA	\$ 12,508.7	\$ 3,067.7	\$ 0.0	\$ 0.0	\$ 1,441.0	\$ 2,000.0	\$ 6,000.0
24-010-02										
	Miscellaneous Safety Improvements	PE, RW, C	40% FHWA	2,000.0	2,000.0	0.0	0.0	0.0	0.0	0.0
		PE, RW, C	80% FHWA	1,500.0	1,000.0	500.0	0.0	0.0	0.0	0.0
24-083-05	Operational Safety Improvements	PE, C	100% ST	1,932.6	307.6	125.0	250.0	250.0	250.0	750.0
	Total All Funds			\$ 17,941.3	\$ 6,375.3	\$ 625.0	\$ 250.0	\$ 1,691.0	\$ 2,250.0	\$ 6,750.0

### SIGNAGE AND PAVEMENT MARKINGS

**PROJECT SCOPE/DESCRIPTION:** The signage projects involve the need for statewide improvements of signage. The goal is to enable not only visitors, but also residents a clear path with appropriate directional signs and to eliminate confusion. The pavement marking program is normally funded through the Operating Budget, but portions of these capital funds will be used to determine improvements, including but not limited to reflective epoxy striping.

**PROJECT JUSTIFICATION:** These improvements will help improve the safety and ease of negotiation of the road system for the traveling public.

County: Statewide

**Municipality:** 

**Funding Program:** Road System – Other

Functional Category: Management Representative District: Statewide Senatorial District: Statewide

# SIGNAGE AND PAVEMENT MARKINGS (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
Signage and Pavement Markings		\$ 2,300.0						
Prior Years	State			\$ 5,998.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 5,998.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 2,300.0	\$ 4,000.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 9,998.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 2,300.0				\$ 12,298.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 2,300.0				\$ 14,598.0
•	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 2,300.0				\$ 16,898.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 6,900.0				\$ 23,798.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 23,798.0	\$ 0.0			\$ 23,798.0
.,	Federal			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 2,300.0	\$ 2,300.0	\$ 23,798.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 23,798.0

# SIGNAGE AND PAVEMENT MARKINGS (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	Signage and Pavement Markings									
	Development Signage	PE, RW, C	100% ST	\$ 3,300.0	\$ 0.0	\$ 0.0	\$ 550.0	\$ 550.0	\$ 550.0	\$ 1,650.0
24-083-02	Pavement Markings	PE, RW, C	100% ST	10,999.0	2,999.0	2,000.0	1,000.0	1,000.0	1,000.0	3,000.0
	Roadway Signage	PE, RW, C	100% ST	9,499.0	2,999.0	2,000.0	750.0	750.0	750.0	2,250.0
	Total All Funds			\$ 23,798.0	\$ 5,998.0	\$ 4,000.0	\$ 2,300.0	\$ 2,300.0	\$ 2,300.0	\$ 6,900.0

#### TRAFFIC CALMING PROGRAM

**PROJECT SCOPE/DESCRIPTION:** This program, initiated in FY 2000, involves the design and construction of traffic calming facilities and non-motorized transportation projects. Traffic calming projects include, but are not limited to, roundabout intersection designs, pedestrian and bicycle facilities, transit access, park and ride facilities, traffic calming, and other solutions to slow traffic. Projects funded from this program over the six years include, but are not limited to, those listed below.

Projects will be identified over the six-year period and recommended for funding by the department's Project Development Committee and State Metropolitan Planning Organizations.

- A permanent roundabout has been constructed on Mifflin Road at the intersection with Woodmill Drive to slow traffic through the development.
- Study and design of residential development traffic calming projects. Construction of these projects are funded with Community Transportation Funds.

**PROJECT JUSTIFICATION:** These improvements enhance multi-modal transportation throughout the state and encourage movement of people and goods through other than single occupant vehicles.

**County:** Statewide

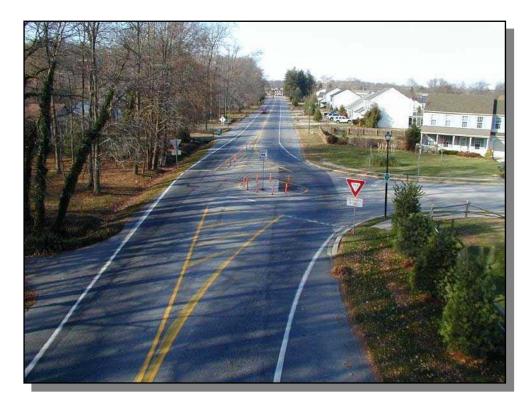
**Municipality:** 

**Funding Program:** Road System – Other

Functional Category: Management Representative District: Statewide Senatorial District: Statewide

# TRAFFIC CALMING PROGRAM (CONTINUED)

Previous Temporary Traffic Roundabout at Mifflin Road, Dover



Current Permanent Roundabout at Mifflin Road, Dover



# TRAFFIC CALMING PROGRAM (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
Traffic Calming Program		\$ 1,250.0						
		,						
Prior Years	State			\$ 1,400.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 1,400.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 1,250.0	\$ 150.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 1,550.0
	Federal		Í	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 1,250.0				\$ 2,800.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 1,250.0				\$ 4,050.0
112000110jeeteu	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 1,250.0				\$ 5,300.0
11 2007 110Jeeted	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 2,500.0				\$ 7,800.0
1 1 2000-2010 1 Tojecteu	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
T I D	0			0 = 000	0.00			a = 222
Total Projected	State			\$ 7,800.0	\$ 0.0			\$ 7,800.0
	Federal Other			\$ 0.0 \$ 0.0	\$ 0.0 \$ 0.0			\$ 0.0 \$ 0.0
Total All Funds		\$ 1,250.0	\$ 1,250.0	\$ 7,800.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 7,800.0

# TRAFFIC CALMING PROGRAM (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	Traffic Calming Program									
	Program	PE, RW, C	100% ST	\$ 7,700.0	\$ 1,300.0	\$ 150.0	\$ 1,250.0	\$ 1,250.0	\$ 1,250.0	\$ 2,500.0
20-042-01	Mifflin Road Roundabout	PE	100% ST	36.0		0.0	0.0	0.0	0.0	0.0
		С	100% ST	64.0	64.0	0.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 7,800.0	\$ 1,400.0	\$ 150.0	\$ 1,250.0	\$ 1,250.0	\$ 1,250.0	\$ 2,500.0

#### TRANSPORTATION ENHANCEMENTS

**PROJECT SCOPE/DESCRIPTION:** The goal of the Transportation Enhancements (TE) Program is to provide the funding needed to support the development and implementation of a variety of non-traditional projects that highlight the cultural, aesthetic, and environmental aspects of the transportation system. Examples of such projects range from the restoration of historic transportation facilities, to pedestrian and bicycle facilities, landscaping and scenic beautification, and the mitigation of water pollution from highway runoff.

The TE Program was established under the federal Intermodal Transportation Efficiency Act (ISTEA) of 1991, and was carried forward through the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) that was passed by Congress in 1998. Under the TE program, states are required to use at least ten percent of their federal Surface Transportation Program (STP) funds for TE projects that fall into one or more of the following categories:

- 1. Pedestrian and bicycle facilities;
- 2. Safety and educational activities for bicyclists and pedestrians;
- 3. Acquisition of scenic easements, and scenic or historic sites;
- 4. Scenic or historic highway programs, including the provision of tourist and welcome center facilities;
- 5. Landscaping and other beautification;
- 6. Historic preservation;
- 7. The preservation of abandoned railway corridors, including conversions for use as pedestrian or bicycle trails;
- 8. Control or removal of outdoor advertising;
- 9. Rehabilitation and operation of historic transportation buildings, structures, or facilities, including historic railroad facilities and canals;
- 10. Archeological planning and research;
- 11. Mitigation of water pollution due to highway runoff; and
- 12. Establishment of transportation museums.

**Project Justification:** This includes a federally mandated program for non-traditional enhancements to transportation infrastructure and services.

County: Statewide

**Municipality:** 

**Funding Program:** Road System – Other

Functional Category: Management Representative District: Statewide Senatorial District: Statewide

Typical TE Program projects from previous years are shown below.

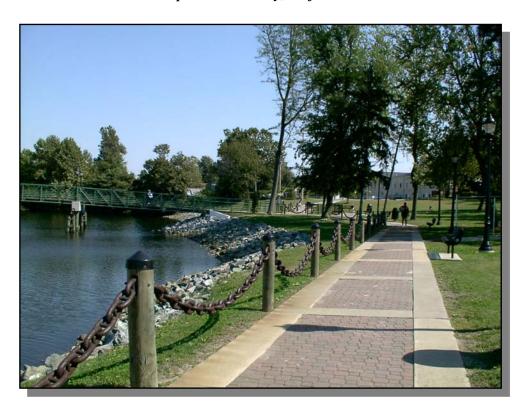
### Cape Henlopen State Park Bicycle Improvements



Bringhurst Woods Pedestrian/Bicycle Improvements



Mispillion Greenway, Milford



Bethany Beach Bicycle Improvements



Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
Transportation Enhancements		\$ 137,046.3						
Prior Years	State			\$ 6,973.5	\$ 6,973.5	\$ 6,309.9	\$ 663.6	\$ 0.0
	Federal			\$ 13,518.0	\$ 13,518.0	\$ 10,571.0	\$ 2,947.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 137,046.3	\$ 5,109.0	\$ 5,109.0	\$ 0.0	\$ 5,109.0	\$ 0.0
	Federal		, ,	\$ 3,219.0	\$ 3,219.0	\$ 0.0	\$ 3,219.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 49,881.0				\$ 49,881.0
F1 2003 Authorizeu	Federal			\$ 3,219.0				\$ 3,219.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 7,781.0				\$ 57,662.0
F 1 2000 110 jected	Federal			\$ 3,219.0				\$ 6,438.0
	Other			\$ 3,219.0				\$ 0,438.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 7,787.3				\$ 65,449.3
-	Federal			\$ 3,244.4				\$ 9,682.4
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 23,362.0				\$ 88,811.3
F 1 2006-2010 1 10 jected	Federal			\$ 9,733.1				\$ 19,415.5
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 100,893.8	\$ 12,082.5			\$ 88,811.3
	Federal			\$ 36,152.5	\$ 16,737.0			\$ 19,415.5
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 137,046.3	\$ 137,046.3	\$ 137,046.3	\$ 28,819.5	\$ 16,880.9	\$ 11,938.6	\$ 108,226.8

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	Transportation Enhancements									
	Program	PE, RW, C	80% FHWA	\$ 44,064.3	\$ 16,602.5	\$ 3,905.0	\$ 3,905.0	\$ 3,905.0	\$ 3,936.7	\$ 11,810.1
	1 Togram	PE, RW, C	100% ST	91,568.0	3,140.0			*	7,000.0	
		PE, RW, C	100% FTA	901.0	236.0	95.0	95.0	95.0	95.0	285.0
22-200-01	Blades Marina	PE, RW, C	100% ST	513.0	513.0	0.0	0.0	0.0	0.0	0.0
	Total All Funds		·	\$ 137,046.3	\$ 20,491.5	\$ 8,328.0	\$ 53,100.0	\$ 11,000.0	\$ 11,031.7	\$ 33,095.1